### **PATENT COOPERATION TREATY**

# **PCT**

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER					
	1	see Form PCT/ISA/220 I as, where applicable, item 5 below.				
BB1545PCT International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)				
PCT/US2005/003332	28/01/2005	02/02/2004				
Applicant						
E.I. DUPONT DE NEMOURS ANI	COMPANY et al.					
This International Search Report has been	n prepared by this International Searching Aut					
according to Article 18. A copy is being tra	ansmitted to the International Bureau.	nonty and is transmitted to the applicant				
This International Search Report consists	of a total of 4 sheets.					
	a copy of each prior art document cited in this	report.				
1. Basis of the report						
language in which it was filed, unl	international search was carried out on the ba ess otherwise indicated under this item.	sis of the international application in the				
The international	search was carried out on the basis of a transf	ation of the international application furnished to				
this Authority (Ru	e 23.1(b)).	ation of the international application furnished to				
b. X With regard to any <b>nucle</b> d	otide and/or amino acid sequence disclosed	in the international application, see Box No. I.				
O Compain plains and factors						
2. Certain claims were four	nd unsearchable (See Box II).					
3. Unity of invention is lack	king (see Box III).					
4. With regard to the title,						
	submitted by the applicant.					
the text has been establis	the text has been established by this Authority to read as follows:					
E Mariah arang an ah arang an						
5. With regard to the abstract,	and the state of t					
the text has been establish		no di con				
may, within one month from	ned, according to Rule 38.2(b), by this Authorit m the date of mailing of this international searc	y as it appears in Box No. IV. The applicant it report, submit comments to this Authority.				
6. With regard to the <b>drawings</b> ,	•					
<u> </u>	a. the figure of the <b>drawings</b> to be published with the abstract is Figure No1					
X as suggested by the	• •					
	Authority, because the applicant failed to sug	•				
	Authority, because this figure better characte published with the abstract.	rizes die invention.				
or the figures is to be	position with the abstract.					

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2005/003332

Вох	No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)	
1.	With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:	
	a. type of material  X a sequence listing table(s) related to the sequence listing	
	b. format of material  X in written format  X in computer readable form	
	c. time of filing/furnishing  X contained in the international application as filed  X filed together with the international application in computer readable form furnished subsequently to this Authority for the purpose of search	
2.	In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.	
3.	Additional comments:	
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## INTERNA I ONAL SEARCH REPORT

International Application No PCT/US2005/003332

A. CLASSI	FICATION OF SUBJECT MATTER C12N15/00 A01H5/00			
According to	o International Patent Classification (IPC) or to both national classifi	cation and IPC		
	SEARCHED			
Minimum do	ocumentation searched (classification system followed by classifica C12N	tion symbols)		
Documental	tion searched other than minimum documentation to the extent that	such documents are included in the fields s	searched	
	ata base consulted during the international search (name of data beternal, BIOSIS, Sequence Search, EM	•	d)	
C. DOCUME	ENTS CONSIDERED TO BE RELEVANT			
Category °	Citation of document, with indication, where appropriate, of the re	elevant passages	Relevant to claim No.	
A	SHUAI BIN ET AL: "The LATERAL O BOUNDARIES gene defines a novel, plant-specific gene family" PLANT PHYSIOLOGY (ROCKVILLE), vol. 129, no. 2, June 2002 (2002 pages 747-761, XP002366088 ISSN: 0032-0889 cited in the application abstract figure 2; table 1		1-22	
χ Furth	er documents are listed in the continuation of box C.	Patent family members are listed	in annex.	
	*Special categories of cited documents :  "T" later document published after the international filling date or priority date and not in conflict with the application but			
considered to be of particular relevance  "E" earlier document but published on or after the international filting date.  "X" document of particular relevance; the claimed invention			claimed invention	
"L" documer which is	nt which may throw doubts on priority claim(s) or scited to establish the publication date of another or other special reason (as specified)	cannot be considered novel or cannot involve an inventive step when the do "Y" document of particular relevance; the constants of particular relevance.	cument is taken alone laimed invention	
"O" docume other m	nt referring to an oral disclosure, use, exhibition or neans	cannot be considered to involve an in document is combined with one or mo ments, such combination being obvior in the art.	ore other such docu-	
later the	nt published prior to the international filing date but an the priority date claimed	*& document member of the same patent		
	ctual completion of the international search 2 February 2006	Date of mailing of the international sea 17/03/2006	rch report	
	alling address of the ISA	Authorized officer	· · · · · · · · · · · · · · · · · · ·	
	European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Vollbach, S		

## INTERNALIONAL SEARCH REPORT

International Application No
PCT/US2005/003332

	PC1/US2005/003332
ation) DOCUMENTS CONSIDERED TO BE RELEVANT	
Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
HOCHHOLDINGER FRANK ET AL: "From weeds to crops: Genetic analysis of root development in cereals." TRENDS IN PLANT SCIENCE, vol. 9, no. 1, January 2004 (2004-01), pages 42-48, XP002366089 ISSN: 1360-1385 page 46 - page 47; table 2	1-22
HETZ WINFRIED ET AL: "Isolation and characterization of rtcs, a maize mutant deficient in the formation of nodal roots" PLANT JOURNAL, BLACKWELL SCIENTIFIC PUBLICATIONS, OXFORD, GB, vol. 10, no. 5, 1996, pages 845-857, XP002182550 ISSN: 0960-7412 cited in the application page 853 - page 855; figure 9	1-22
HOCHHOLDINGER FRANK ET AL: "Genetic dissection of root formation in maize (Zea mays) reveals root-type specific developmental programmes" ANNALS OF BOTANY (LONDON), vol. 93, no. 4, April 2004 (2004-04), pages 359-368, XP002366090 ISSN: 0305-7364 page 366 - page 367; tables 1,2	1-22
DATABASE UniProt 'Online!  1 March 2003 (2003-03-01), "Hypothetical protein OSJNBb0050N02.10."  XP002369174  retrieved from EBI accession no.  UNIPROT:Q8H081  Database accession no. Q8H081  cited in the application the whole document	1-22
	HOCHHOLDINGER FRANK ET AL: "From weeds to crops: Genetic analysis of root development in cereals." TRENDS IN PLANT SCIENCE, vol. 9, no. 1, January 2004 (2004-01), pages 42-48, XP002366089 ISSN: 1360-1385 page 46 - page 47; table 2  HETZ WINFRIED ET AL: "Isolation and characterization of rtcs, a maize mutant deficient in the formation of nodal roots" PLANT JOURNAL, BLACKWELL SCIENTIFIC PUBLICATIONS, OXFORD, GB, vol. 10, no. 5, 1996, pages 845-857, XP002182550 ISSN: 0960-7412 cited in the application page 853 - page 855; figure 9  HOCHHOLDINGER FRANK ET AL: "Genetic dissection of root formation in maize (Zea mays) reveals root-type specific developmental programmes" ANNALS OF BOTANY (LONDON), vol. 93, no. 4, April 2004 (2004-04), pages 359-368, XP002366090 ISSN: 0305-7364 page 366 - page 367; tables 1,2  DATABASE UniProt 'Online! 1 March 2003 (2003-03-01), "Hypothetical protein OSJNBb0050N02.10." XP002369174 retrieved from EBI accession no. UNIPROT:Q8H081 Database accession no. Q8H081 cited in the application